



Practitioner's Docket No.

57764 (71994)

**PATENT** 

Preliminary Classification: Proposed Class: 435 Subclass: 6

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example Proposed Class 2, subclass 129." M.P.E.P. Section 601, 7th ed.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Mail Stop Patent Application** Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

Sakari KAUPPINEN and Nana JACOBSEN Inventor(s):

**WARNING:** 37 CFR 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title): Methods and Systems for Detection and Isolation of a Nucleotide Sequence

#### **CERTIFICATION UNDER 37 C.F.R. 1.10\***

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this correspondence and the documents referred to as attached therein are being deposited with the United States Postal Service on this date June 20, 2003 in an envelope as Express Mail Label No. EV 343731694 US addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Helen Murray Tarbi

(type or print name of person mailing paper)

Signature of person mailing paper

**WARNING:** 

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to

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obtain a date of mailing or transmission for this correspondence.

\*WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442

# 1. Type of Application

This new application is for a(n)

(check one applicable item below)

[X] Original (nonprovisional)		Original (nonprovisional)				
	[]	Design				
	[]	Plant				
WARNING:		<b>Do not</b> use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-inpart application.				
WARNING:		Do not use this transmittal for the filing of a provisional application.				
TRANS		the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION HITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT ATION OF THE FILING OF THIS CONTINUATION APPLICATION.				
	[]	Divisional.				
	[]	Continuation.				
	[]	Continuation-in-part (C-I-P).				

# 2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e)

This application claims priority under 35 U.S.C. § 119(e) to U.S. provisional application number 60/390,928, filed June 24, 2002, the entirety of which is incorporated by reference herein.

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16: or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 CFR 1.78(a)(1).

NOTE If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

**WARNING:** 

If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

**WARNING:** 

When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).

## 3. Papers Enclosed

A. Required for Filing Date under 37 C.F.R. 1.53(b) (Regular) or 37 C.F.R. 1.153 (Design) Application

74	Pages of Specification		
18	Pages of Claims		
11	Sheets of Drawing		
	[X] Formal		
	[ ] Informal		

## B. Other Papers Enclosed

1	Page of Abstrac
	Other

**WARNING:** 

**DO NOT** submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then

C.F.R. 1.84, see Notice of March 9, 1988 . . . (1990 O.G. 57-62). "Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, NOTE: docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page." 37 C.F.R. 1.84(c)). (complete the following, if applicable) The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. 1.84(b). 4. Additional Papers Enclosed [] Preliminary Amendment [] Information Disclosure Statement (37 C.F.R. 1.98)

submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37

Citations Declaration of Biological Deposit [] Submission of "Sequence Listing," computer readable copy and/or amendment [] pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence. Authorization of Attorney(s) to Accept and Follow Instructions from Representative [] Special Comments

Other: []

Form PTO-1449

#### 5. **Declaration or Oath**

NOTE: A newly executed declaration is not required in a continuation or divisional application provided the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47 then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 CFR 1.63(d).

A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name, including the family name, and at least one given name without abbreviation together with any other given name or initial, and the residence, post office address and country of citizenship of each

inventor	and state	e whether the inventor is a sole or joint inventor. 37 CFR 1.63(a)(1)-(4).			
[]	Enclosed Executed by				
		(check all applicable boxes)			
	[]	inventor(s)			
	[]	legal representative of inventor(s). 37 CFR 1.42 or 1.43.			
	[]	joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.			

	[X]	by 37 CFR 1.47 is also attached. See item 13 below for fee.  Not Enclosed.
NOTE:	Where th	the filing is a completion in the U.S. of an International Application, or where the completion of the U.S. application contains subject matter in addition to the International Application, the application may be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.
		[X] Application is made by a person authorized under 37 C.F.R. 1.41(c) on behalf of all the above named inventor(s).
	(T	he declaration or oath, along with the surcharge required by 37 CFR 1.16(e), can be filed subsequently).
NOTE:	It is imp	ortant that all the correct inventor(s) are named for filing under 37 CFR 1.41(c) and 1.53(b).
		[ ] Showing that the filing is authorized.  (not required unless called into question. 37 CFR 1.41(d))
6.	Invent	orship Statement
WARNI	NG:	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inv	ventorsh	ip for all the claims in this application are:
	[]	The same.
	[]	Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,  [ ] is submitted.  [ ] will be submitted.
7.	Langu	age
		cation including a signed oath or declaration may be filed in a language other than English. An English on of the non-English language application and the processing fee of \$130.00 required by 37 CFR 1.17(k) is to be filed with the application, or within such time as may be set by the Office. 37 CFR 1.52(d).
	[X] [ ]	English Non-English [ ] The attached translation includes a statement that the translation is accurate. 37 C.F.R. 1.52(d).
8.	Assign	ment
	[]	An assignment of the invention to Exiqon A/S

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[ ] is attached. A separate [ ] "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or [ ] FORM PTO 1595 is also attached.

[X] will follow.

NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment" Notice of May 4, 1990 (1114 O.G. 77-78).

**WARNING:** 

A newly executed "STATEMENT UNDER 37 CFR 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

# 9. Certified Copy

Certified copy(ies) of application(s)

Count	ry	Appln. No.	Filed	
from v	vhich priority is	s claimed		
[ ] [ ] [ ]	is enclosed. was filed in p will follow.	arent application.		

NOTE: The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

# 10. Fee Calculation (37 C.F.R. 1.16)

## A. [X] Regular application

CLAIMS AS FILED					
Claims	Number Filed	Basic Fee Allowance	Number Extra	Rate	Basic Fee 37 C.F.R. 1.16(a) \$750.00
Total Claims (37 CFR 1.16(c))	130	- 20 =	110	x \$ 9.00	
Independent Claims (37 CFR 1.16(b))	8	- 3 =	5	x \$ 42.00	
Multiple Dependent Claim(s), if any (37 CFR 1.16(d))	0		+	\$280.00	

	[]	Amen	Amendment cancelling extra claims is enclosed.  Amendment deleting multiple-dependencies is enclosed.  Fee for extra claims is not being paid at this time.				
NOTE:				iling they must be paid or the claims o by the Patent and Trademark Office in			
	1.10(4).			Filing Fee Calculation	\$		
	В.	[]	Design application (\$330.00—37 CFR 1	1.16(f))			
				Filing Fee Calculation	\$		
	C.	[]	Plant application (\$540.00—37 CFR	1.16(g))			
				Filing Fee Calculation	\$		
11.	Small	Entity	Statement(s)				
	[X]	Staten attach	* *	iling by a small entity under 3	37 CFR 1.9 and 1.27 is (are)		
WARNI	NG:	ation or patent in which the status is does not affect any other application by dependent upon the application or ation under § 1.53 as a continuation, ation under § 1.53(d)), or the filing of the different to small entity status for the benefit under 35 U.S.C. 119(e), 120, by on a statement filed in the prior application includes a reference to the statement in the prior application from the prior application includes a reference to the statement of the small entity basic action." 37 CFR 1.28(a)(2).					
			(complete	the following, if applicable)			
	[]			laimed in prior application m which benefit is being claime			
		35 U.S	S.C. § [] 119( [] 120, [] 121, [] 365(	,			
		and w	hich status as a small en	ntity is still proper and desired.			

	[ ] A copy of the statement in the prior application is included.			
		Filing I	Fee Calculation (50% of A, B or C above) \$	
NOTE:			full fee paid will be refunded if a small entity status is established of timely payment of a full fee. The two-month period is not extendable	
12.	Reque	st for In	ternational-Type Search (37 C.F.R. 1.104(d))	
			(complete, if applicable)	
	[]		prepare an international-type search report for this ap l examination on the merits takes place.	plication at the time when
13.	Fee Pa	yment F	Being Made at This Time	
	[X]	Not En	closed	
		[X] ·	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. 1.16(e) of	an be paid subsequently.)
	[]	Enclose	ed	
		[]	Filing fee	\$
		[]	Recording assignment (\$40.00; 37 C.F.R. 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$
		[]	Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. 1.47 and 1.17(i))	\$
		[]	For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. 1.52(d) and 1.17(k))	\$
		[]	Processing and retention fee (\$130.00; 37 C.F.R. 1.53(d) and 1.21(l))	\$
		[]	Fee for international-type search report (\$40.00; 37 C.F.R. 1.21(e))	\$

NOTE: 37 CFR 1.21(l) establishes a fee for processing and retaining any application that is abandoned for failing to complete the application pursuant to 37 CFR 1.53(f) and this, as well as the changes to 37 CFR 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(1) must be paid, within 1 year from notification under § 53(f). Total Fees Enclosed 14. Method of Payment of Fees Check in the amount of \$\_\_\_\_\_ [ ] Charge Account No. \_\_\_\_\_\_ in the amount of \$\_\_\_\_\_. [] A duplicate of this transmittal is attached. NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 CFR 1.22(b). 15. Authorization to Charge Additional Fees **WARNING:** If no fees are to be paid on filing, the following items should not be completed. **WARNING:** Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized. The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. .04-1105 37 C.F.R. 1.16(a), (f) or (g) (filing fees) 37 C.F.R. 1.16(b), (c) and (d) (presentation of extra claims) NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action. []37 C.F.R. 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application) 37 CFR 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a). [] [] 37 C.F.R. 1.17 (application processing fees) NOTE: "A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a

petition for an extension of time under this paragraph for its timely submission." 37 CFR 1.136(a)(3).

		[]	37 C.F.R. 1. 37 C.F.R. 1.	•	t or before mailing of Notice of Allowance, pursuant to	
NOTE:	Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 CFR 1.311(b)).					
NOTE:	37 CFR 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application prior to paying, or at the time of paying, issue fee." From the wording of 37 CFR 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.					
16.	Instru	ctions as	s to Overpayr	nent		
				nounts; amounts o	e returned unless specifically requested within a reasonable time, nor ver twenty-five dollars may be returned by check or, if requested, by	
	[]	Credit .	Account No	04-1105	<del></del> -	
	[]	Refund	I			
Date: .	June 20,	2003			SIGNATURE OF PRACTITIONER	
Reg. N	o. 45,2	81			Dianne M. Rees (type or print name of practitioner)	
Геl. No.: (617) 439-4444					EDWARDS & ANGELL, LLP P.O. Box 9169 P.O. Address	
					Boston, MA 02209	

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